

Work Order ID 81803

Blue
81803

Page 1

March-19-12 1:34:15 PM

Item ID: D2933-1

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Saddle LH In, 206

Start Date: 19/03/2012 Start Qty: 8.00

8

Cust Item ID:

Required Date: 18/05/2012 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals: Process Plan: *MLJ*

Date: 12/03/19 Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2933	Rev C								
100	HAAS CNC VERTICAL MACHINING #1	0.00							
100									
HAAS 1	Memo	0.00							
HAAS CNC vertical machine #1	Program part number and batch number. 1-Inspect part number and batch number are programmed correctly. 2-Machine Step No 1 of Folio and visually inspect as per dwg D2933 & attached Dimension Sheet 3-Machine Step No 2 of Folio and visually inspect as per								
			<i>ba/po</i>	<i>12/03/29</i>		<i>8</i>	<i>φ</i>		
110	CONVENTIONAL MILLING MACHINE	0.00							
110									
Mill Conv	Memo	0.00							
Conventional Milling Machine	Machine Keyway and inspect per attached dimension sheet								
			<i>ba/po</i>	<i>12/03/29</i>		<i>8</i>	<i>φ</i>		
120	QC1- Inspect dimensions to dimension sheet	0.00							
120									
QC	Memo	0.00							
Quality Control			<i>ba/po</i>	<i>12/03/29</i>		<i>8</i>	<i>φ</i>		

pt03

Dart Aerospace Ltd

W/O: 81803		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2933-1 PAR #: Fault Category: Machining NCR: Yes No DQA: Date: 12/04/27
 Resolution: use - as is Disposition: use - as is QA: N/C Closed: Date: 12/4/27

NCR: 121381		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12/03/29	100	Dim (M) is at 0,233 on one side only <u>.235 +.005/-0.000</u>	CP 12.04.03 Q51042	Acceptable	PD 12/03/29	12.04.03 Q51042	CP 12.04.03 Q51042	S 12/4/27

NOTE: Date & initial all entries

Work Order ID 81803

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Page 2

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Cust Item ID:

Required Date: 18/05/2012 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

QC8- Inspect parts - second check

0.00

130

QC

Memo

0.00

Quality Control

12.4.4 8 d

140

Chemical Conversion Coat per QSI005 4.1

0.00

140

HandFinish

Memo

0.00

Hand Finishing

8 BR 12-21-5.

155

Spray Painting per QSI005 4.2

0.00

155

SprayPaint

Memo

0.00

Spray Painting

PRIME B 117319
DELFLEET BLUE B 121149
CLEAR DELFLEET B 118093

AS 12-4-8 (8)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 81803

81803

Page 3

March-19-12 1:34:15 PM

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Revision ID:

Stop ***NS2***

Item Name: Saddle LH In, 206

Start Date: 19/03/2012 Start Qty: 8.00

8

Cust Item ID:

Required Date: 18/05/2012 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
165	QC14- Inspect Spray Paint	0.00							
165									
QC	Memo	0.00							
Quality Control									
170	Identify as per dwg & Stock Location: <u>421</u>	0.00							
170									
Packaging	Memo	0.00							
Packaging									
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.00							
Quality Control									

81 81 12-04-09

81 12/4/23

12/4/25

mf
12-04-24

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-19-12 1:34:19 PM

Page 1

Work Order ID: 81803

81803

Parent Item: D2933-1

D2933-1

Parent Item Name: Saddle LH In, 206

Start Date: 19/03/2012

Required Date: 18/05/2012

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP: B00.06.26New DWG rev (mpp 2069)EC
IPP Rev:C As per Rev C 07-03-19 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-001		Manufactured	No			100	Each	53.0000	1	8			

D6101-001

Saddle Billet

**

PO 12/03/24

Location

Loc Qty

Loc Code

MAT040

3

69677

2

76836

1

MAT041

50



80764

50

8

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	81803
Description: 206 Saddle, Inboard, Left side		Part Number:	D2933-1
Inspection Dwg: D2933 Rev: C DSK: Rev:		Page 1 of 1	

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				1	2	3	4	5
A	0.100	0.140		0.130	0.130	0.125	0.125	0.125
B	0.100	0.140		0.130	0.130	0.125	0.125	0.125
C	0.100	0.140		0.103	0.112	0.112	0.112	0.112
D	0.210	0.230		0.222	0.222	0.221	0.222	0.221
E	1.245	1.255		1.250	1.250	1.250	1.250	1.250
F	1.245	1.255		1.250	1.250	1.250	1.250	1.250
G	2.495	2.505		2.500	2.500	2.500	2.500	2.500
H	0.510	0.515		0.512	0.512	0.512	0.511	0.511
I	1.572	1.582		1.577	1.577	1.577	1.577	1.577
J	2.495	2.505		2.500	2.500	2.500	2.500	2.500
K	0.257	0.262		0.258	0.258	0.258	0.258	0.258
L	0.312	0.317		0.313	0.313	0.313	0.313	0.313
M	0.235	0.240		0.233	0.235	0.235 ^{0.235}	0.236	0.236
N	0.100	0.140		0.125	0.127	0.126	0.125	0.126
O	0.540	0.560		0.548	0.549	0.549	0.549	0.549
P	0.490	0.510		0.500	0.501	0.501	0.500	0.500
Q	3.715	3.725		3.718	3.720	3.720	3.720	3.720
R	2.470	2.510		2.492	2.492	2.492	2.492	2.492
S	0.240	0.270		0.251	0.250	0.250	0.250	0.250
T	0.100	0.180		0.135	0.135	0.135	0.135	0.135
U	1.625	1.635		1.630	1.630	1.630	1.630	1.630
V	1.362	1.372		1.367	1.367	1.367	1.367	1.367
W	0.316	0.321		0.316	0.316	0.316	0.316	0.316
X	1.125	1.145		1.137	1.137	1.138	1.138	1.137
Y	1.565	1.585		1.576	1.574	1.575	1.578	1.577
Z	0.178	0.198		0.188	0.188	0.188	0.188	0.188
AA								
AB								
AC								
AD								
AE								
Accept/Reject								

Measured by: PD/BA	Date: 12/03/29
Audited by: [Signature]	Date: 12.7.8
Prototype Approval: N/A	Date: N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Re-format; Added Dim. X-Y, DT8683, DT8686, DT8690 & DT8695 A/B	KJ/RF	
C	06.10.03	Removed DT8683, DT8686 & DT8690	KJ/JLM	
D	07.03.21	Revised per drawing revision C	KJ/JLM	
E	08.01.16	DT8695 A/B removed from dimension Y	KJ/EC/DD	[Signature]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	81863
Description: 206 Saddle, Inboard, Left side		Part Number:	D2933-1
Inspection Dwg: D2933	Rev: C	DSK:	Rev:
			Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET



First Article

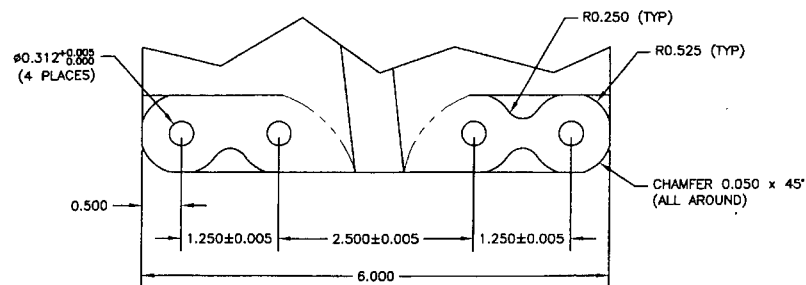


Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	+6	-7	-8	4	5
A	0.100	0.140		0.125	0.125	0.128		
B	0.100	0.140		0.125	0.125	0.122		
C	0.100	0.140		0.111	0.112	0.112		
D	0.210	0.230		0.222	0.221	0.220		
E	1.245	1.255		1.250	1.250	1.250		
F	1.245	1.255		1.250	1.250	1.250		
G	2.495	2.505		2.500	2.500	2.500		
H	0.510	0.515		0.511	0.511	0.511		
I	1.572	1.582		1.577	1.577	1.577		
J	2.495	2.505		2.500	2.500	2.500		
K	0.257	0.262		0.258	0.259	0.258		
L	0.312	0.317		0.313	0.313	0.313		
M	0.235	0.240		0.235	0.236	0.236		
N	0.100	0.140		0.126	0.127	0.126		
O	0.540	0.560		0.549	0.550	0.549		
P	0.490	0.510		0.499	0.500	0.500		
Q	3.715	3.725		3.720	3.720	3.720		
R	2.470	2.510		3.497	3.492	3.492		
S	0.240	0.270		0.249	0.248	0.250		
T	0.100	0.180		0.135	0.135	0.135		
U	1.625	1.635		1.630	1.630	1.630		
V	1.362	1.372		1.367	1.367	1.367		
W	0.316	0.321		0.316	0.316	0.316		
X	1.125	1.145		1.137	1.137	1.137		
Y	1.565	1.585		1.577	1.578	1.578		
Z	0.178	0.198		0.188	0.188	0.188		
AA								
AB								
AC								
AD								
AE								
Accept/Reject								

Measured by:	PD/A.A	Date:	12/03/29
Audited by:	29	Date:	12.4.4
Prototype Approval:	N/A	Date:	N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Re-format; Added Dim. X-Y, DT8683, DT8686, DT8690 & DT8695 A/B	KJ/RF	
C	06.10.03	Removed DT8683, DT8686 & DT8690	KJ/JLM	
D	07.03.21	Revised per drawing revision C	KJ/JLM	
E	08.01.16	DT8695 A/B removed from dimension Y	KJ/EC/DD	

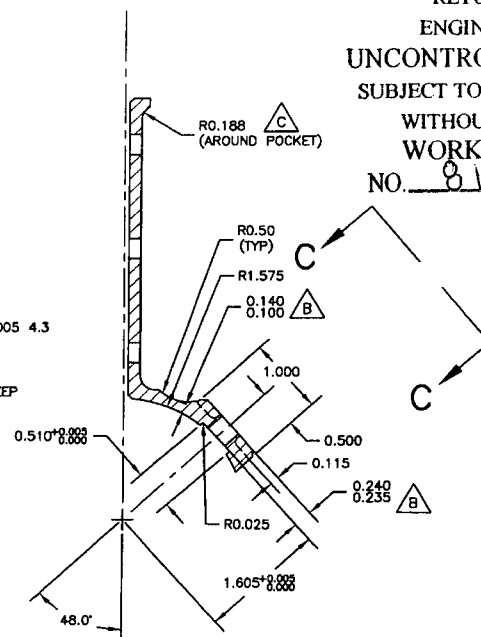


VIEW C-C

D2933-1 LH SADDLE (SHOWN)
D2933-2 RH SADDLE (OPPOSITE)

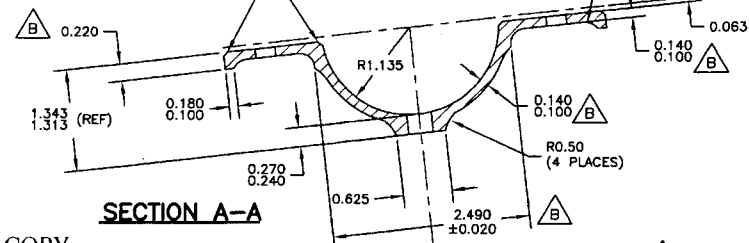
NOTES:

- 1) MATERIAL: ALUMINUM 7075-T7351 (QQ-A-250/12)
(MAKE FROM D6101-001 SADDLE BILLET, 7075)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
- 3) BREAK ALL SHARP EDGES 0.010 TO 0.020
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) ENGRAVE PART AND BATCH NUMBER IN THIS AREA 0.010 TO 0.015 DEEP



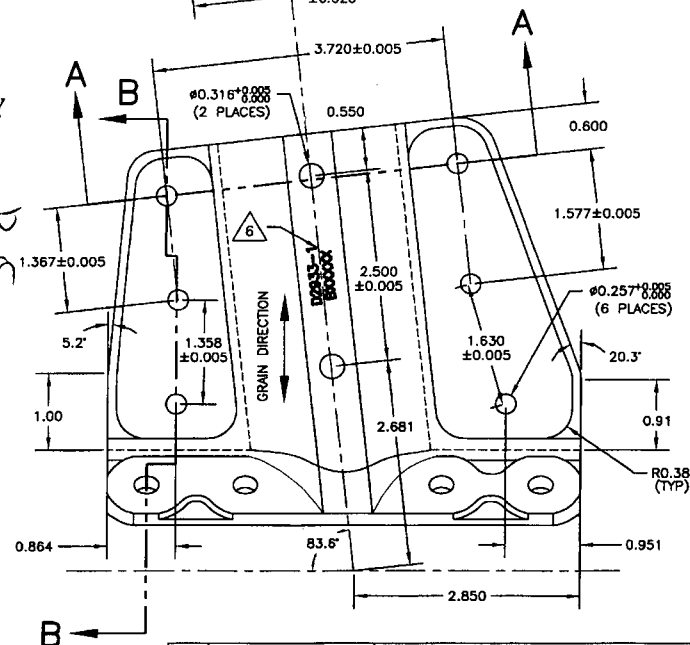
SECTION B-B

CHAMFER 0.050 x 45° AROUND
THIS SURFACE (TYP 2 PLACES)



SECTION A-A

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 81803 MLW
12/03/19



C	06.11.09	R0.188 WAS R0.30 TO R0.25
B	00.05.29	CHANGED GEOMETRY AND MATERIAL
A	99.10.29	NEW ISSUE
DESIGN	CB	DART DART AEROSPACE USA, INC. BELLEVUE, WA
CHECKED	PH	DRAWING NO. D2933
DATE	06.11.09	TITLE SADDLE INSIDE
		REV. C SHEET 1 OF 1 SCALE 2:3

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DART AEROSPACE USA, INC.

07.02.12

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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